| | Application No. | Applicant(s) |
|---|---|---|
| ***Notice of Allowability*** | 09/849,737 | HUANG ET AL. |
| | Examiner | Art Unit | |
| | Elias Desta | 2857 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--*

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to *amendment filed on May 29, 2005*.

2. ☒ The allowed claim(s) is/are *1-16, 24 and 26*.

3. ☒ The drawings filed on *04 May 2001* are accepted by the Examiner.

4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All   b) ☐ Some*   c) ☐ None   of the:

        1. ☐ Certified copies of the priority documents have been received.

        2. ☐ Certified copies of the priority documents have been received in Application No. _____ .

        3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

   * Certified copies not received: _____ .

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

6. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.

    (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached

        1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____ .

    (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of
        Paper No./Mail Date _____ .

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☐ Notice of References Cited (PTO-892)

2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)

3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____

4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material

5. ☐ Notice of Informal Patent Application (PTO-152)

6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____ .

7. ☐ Examiner's Amendment/Comment

8. ☒ Examiner's Statement of Reasons for Allowance

9. ☐ Other _____ .

HAL WACHSMAN
PRIMARY EXAMINER

# Detailed Action

## Response to Applicant's Remark

1.     The Examiner acknowledges the cancellation of claims 17-23 & 25 and the

amendment to claims 24 and 26 to overcome the objection noted in the previous

office action.  Claims 24 and 26 are now allowable.

## Allowance

2.     *Claims 1-16, 24 and 26* are allowed. The following is an examiner's statement

of reasons for allowance:

In reference to claims 1, 5, 9, 13, 24 and 26: *Beigi et al*. (U.S. Patent

6,246,982) teaches a method of computing a distance measure between multiple

mixtures type probability distribution functions (see *Beigi et al*., Figs. 1-3 and

Abstract). The method includes the steps of evaluating a joint distribution function

(see *Beigi et al*., Figs. 4A and 4B, and column 2, lines 32-37). As the sum value of $\mu_I$

and $\gamma_k$ over the range of I=1 to N and k=1 to K equate to a value one is simply

showing that the outcome of the sum of probability of events is always one.

However, *Beigi et al*. does not teach that the weight factor, $\omega_{ik}$s are related to

distribution whose values are much smaller. Further, the sum of the weight factors

noted above over the variable "i" is equal to the mean distance. Hence, the method

of the distance computation in the claimed invention is expressed as:

$$D_M(G, H) = \frac{\min}{w = [\omega ik]} \sum_{i=1}^{N} \sum_{k=1}^{K} \omega ik * d(gi, hk).$$

The remaining *claims* are dependent upon *claims 1, 5, 9 and 13* and contain further limitations.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

## Conclusion

3.    Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elias Desta whose telephone number is (571)-272-2214. The examiner can normally be reached on M-Thu (8:30-7:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marc S. Hoff can be reached on (571)-272-2216. The fax phone numbers for the organization where this application or proceeding is assigned are (703)-872-9306 for regular communications and After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571)-272-1750.

Elias Desta
Examiner
Art Unit 2857

-ed

June 23, 2005

HAL WACHSMAN
PRIMARY EXAMINER
AU 2857